

10 April 2009

K091050
510K Summary

MAY 27 2009

Model 506CN Patient Monitor

Contact: Alex Kaplan
Director of QA & RA
Criticare Systems, Inc.
20925 Crossroads Circle
Waukesha, WI 53186 USA
262-798-8282 Voice
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Trade Name: 506CN Patient Monitor

Common Name: Vital Signs Monitor

Classification Name: Monitor, Physiological, Patient (74D-RT)

Substantial Equivalence is claimed to : 506 Vital Signs Monitoring System (K051038).

Device Description:

The 506CN monitor measures and displays real time physiological data of the patient, including a graphical plethysmogram and numerical data. The 506CN can be used to monitor one or more of the following parameters: Noninvasive BP (NIBP) and SpO₂. For all these vital parameters, the 506CN will be capable of limit alarms and alerts, printing of strip chart recordings and storing trends for retrospective review.

Intended Use:

This system is intended to monitor physiological parameters of patients within any healthcare environment. The user, responsible to interpret the monitored data made available, will be a professional health care provider. Physiological data, system alarms and patient data analysis will be available to the care provider from the monitor.

Comparison with predicate device:

Criticare Systems Inc. has developed and distributed physiological monitoring devices worldwide since its inception in 1984. The 506CN monitor utilizes existing core technologies from the predicate 506 monitor for patient monitoring of NIBP and SpO₂. The patient data collected by the 506CN monitor is displayed for the user on a graphic

LCD equivalent to the predicate device. Membrane key panels provide a user interface equivalent to the predicate device. The packaging design of the 506CN monitor is molded plastic and allows for it to be either a stationary monitor or to be used during patient translocation within the healthcare facility, as did the predicate 506.

Determination of Substantial Equivalence:

The 506CN monitor performance for each monitoring modality has been confirmed to be equivalent to the predicate device. Additionally, the 506CN complies with applicable safety and performance standards (detailed below) for each monitoring modality and verification of compliance has been completed. The patient monitoring technologies present in the 506CN monitor have been in clinical use for at least six years in the 506 monitor and its predicates. CSI's field experience with these modalities in the predicate devices has been satisfactory. This combination of equivalence testing, applicable objective standards compliance and field experience substantiates a high level of confidence in the safety and efficacy of the 506CN monitor.

Therefore, the 506CN monitor is substantially equivalent to the predicate devices.

Compliance to standards and regulations:

The 506CN Vital Signs Monitor complies with the following national and international standards:

Safety

IEC 60601-1 Medical Electrical Safety
IEC 60601-1-2 EMC Compliance
ISO 10993-5,10-11 Biocompatibility
IEC 60601-1-8 Alarms

Performance

ISO 9919 Oximetry Performance
IEC 60601-2-30 NIBP Safety
EN 1060-1 NIBP Performance
EN 1060-3 NIBP Performance
AAMI SP-10 NIBP Performance



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

MAY 27 2009

Food and Drug Administration
9200 Corporate Boulevard
Rockville MD 20850

Criticare Systems, Inc.
c/o Mr. Alex Kaplan
Director of QA & QC
20925 Crossroads Circle
Waukesha, WI 53186

Re: K091050
506CN Vital Signs Monitor
Regulation Number: 21 CFR 870.2300
Regulation Name: Cardiac monitor (including cardiometer and rate alarm)
Regulatory Class: Class II (two)
Product Code: DRT, DQA
Dated: May 12, 2009
Received: May 12, 2009

Dear Mr. Kaplan:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0120. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (240) 276-3150 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>.

Sincerely yours,



Bram D. Zuckerman, M.D.
Director
Division of Cardiovascular Devices
Office of Device Evaluation
Center for Devices and
Radiological Health

Enclosure

Indications for Use

510(k) Number (if known): K091050

Device Name: 506CN Vital Signs Monitor

Indications For Use:

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Prescription Use ✓

AND/OR

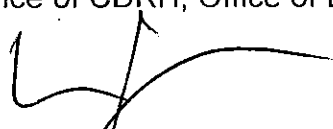
Over-The-Counter Use

(Part 21 CFR 801 Subpart D)

(21 CFR 801 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)



(Division/Sign-Off)
Division of Cardiovascular Devices
510(k) Number K091050